

What is claimed is:

1. An aqueous composition comprising:

a polymer comprising as polymerized units, based on the total weight of said polymer:

a) from greater than 7.5 to 100 weight % of at least one ionic monomer,
and

b) from 0 to less than 92.5 weight % of at least one second monomer;

wherein said polymer is formed by an aqueous free radical polymerization process in the presence of 0.01 to 1 weight %, based on the total weight of said polymer, of an organic compound selected from the group consisting of t-alkyl hydroperoxides, t-alkyl peroxides, t-alkyl peresters, and mixtures thereof, wherein said t-alkyl group has at least 5 carbon atoms.

2. The aqueous composition according to claim 1, wherein said aqueous free radical polymerization process comprises the steps of polymerizing 90 to 99.7 weight % of said monomers, based on the total weight of said polymer, and then polymerizing at least half of the remaining monomer in the presence of 0.01 to 0.5 weight % of said organic compound, based on the total weight of said polymer.

3. The aqueous composition according to claim 2 wherein said organic compound is present only after polymerization of 90 weight % of said monomers, based on the total weight of said polymer.

4. The aqueous composition according to claim 1 wherein said polymer comprises from 20 to 65 weight % of at least one ionic monomer.

5. The aqueous composition according to claim 4 wherein said at least one second monomer is a nonionic surfactant monomer.

6. An aqueous polymerization process for preparing an aqueous composition comprising a polymer, said polymer comprising as polymerized units, from

greater than 7.5 to 100 weight % of at least one ionic monomer; and from 0 to less than 92.5 weight % of at least one second monomer, based on the total weight of said polymer;

comprising the step of:

a) polymerizing said monomers in an aqueous reaction medium by free radical polymerization in the presence of 0.01 to 1 weight %, based on the total weight of said polymer, of an organic compound selected from the group consisting of t-alkyl hydroperoxides, t-alkyl peroxides, t-alkyl peresters, and mixtures thereof, wherein said t-alkyl group has at least 5 carbon atoms.

7. The process according to claim 6 comprising the step of polymerizing from 90 to 99.7 weight % of said monomers, based on the total weight of said polymer, and then the step of polymerizing at least half of the remaining monomer in the presence of 0.01 to 0.5 weight % of said organic compound, based on the total weight of said polymer.

8. The process according to claim 7 wherein said organic compound is present only after polymerization of 90 weight % of said monomers, based on the total weight of said polymer.

9. The process according to claim 6 wherein said polymer comprises from 20 to 65 weight % of at least one ionic monomer.

10. The process according to claim 6 wherein said at least one second monomer is a nonionic surfactant monomer.